REMARKS

The rejections presented in the Office Action dated December 30, 2003 have been considered. Claims 1-33 remain pending in the application. Reconsideration and allowance of the application is respectfully requested.

An IDS accompanies this Amendment and includes pages 424-443 that describe Poisson disk sampling from the book by Glasner as requested in the Office Action.

Claims 1, 21, and 24 are amended to correct typographical errors and place the application in better position for allowance or appeal. The amendments are not made for purposes of patentability.

For the reasons explained herein and those set forth in the previous response, the Office Action fails to show that claims 1-14, 16, and 19-21, 24, and 26-33 are unpatentable under 35 USC §103(a) over the paper entitled, "Detecting Seasonal Trends and Cluster Motion Visualization for Very High Dimensional Transaction Data" by Gupta et al. ("Gupta") in view of US patent number 5,794,209 to Agrawal et al. ("Agrawal"); fails to establish that claims 15 and 17-18 are unpatentable under 35 USC §103(a) over Gupta in view of Agrawal and further in view of WIPO document number WO 01/08072 A1 by Ratnavale ("Ratnavale"); and further fails to establish that claims 1 and 11 are unpatentable under 35 USC §103(a) over Gupta in view of the paper entitled, "Evaluation of Sampling for Data Mining of Association Rules" by Zaki et al. ("Zaki").

The Final Office Action specifically addresses some of the issues raised in the previous response, and selected ones of those issues are addressed further in the following paragraphs. The arguments presented in the response to the first Office Action are maintained and incorporated herein by reference. The arguments presented in the previous response address any issues not specifically discussed herein.

One issue is whether the Office Action provides sufficient evidence of a motivation to modify Gupta with the teachings of Agrawal. It is respectfully submitted that the supplemented explanation in the current Office Action is insufficient just as the alleged motivation in the first Office Action is insufficient. The alleged reasons are insufficient because the Office Action does not demonstrate that Gupta has any need of directed edges to represent associated confidence

levels between items. Specifically, Gupta addresses seasonal trends of product purchases (Section 3). Thus, there is no apparent mechanism in Gupta that would accommodate the use of directed edges to represent associated confidence levels between items. Therefore, the alleged motivation to combine Agrawal with Gupta is still improper.

Another issue is whether Gupta suggests "generating a graph of the items by arranging the items on a spherical surface." It is respectfully submitted that the reading of these limitations as explained in the Office Action does not appear to recognize that the items are arranged on a spherical surface. The Office Action maintains that Gupta's Figure 4 shows this limitation. However, Gupta's Figure 4 does not show a sphere and instead shows a 3-D plot of data by time, similarity, and dimension values. To be clear, there is no apparent sphere in Gupta.

The current Office Action attempts to further explain the allegation that Gupta suggests the limitations of "defining a stiffness measure of a spring attached to each pair of items." It is respectfully submitted that the current explanation does not show that Gupta suggests these limitations for at least two reasons. First, Gupta does not deal with item pairs and would have no need of a stiffness measure between pairs. Second, the explanation ignores that it is the "stiffness measure of a spring" that is used, which distinguishes the claim language from the proffered elements of Gupta alleged to suggest "stiffness" by itself.

The Office Action fails to show that Agrawal suggests "generating a confidence matrix for defining the confidence level of each association" (claim 2). Specifically, the Office Action does not show any evidence of a matrix in Agrawal, even though the Office Action does show that Agrawal suggests confidence levels.

The Office Action fails to show that either Gupta or Agrawal suggests "distributing the items equally on a spherical surface by employing a Poisson Disc Sampling" (claim 7). It is respectfully submitted that the claims do not recite Poisson Disc Sampling by itself, but rather apply Poisson Disc Sampling to distributing the items on the spherical surface. As explained previously, the Office Action has not made any showing of distributing items on a spherical surface, and therefore, fails to show any suggestion of how the distribution on the spherical surface could be accomplished.
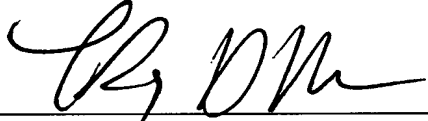
The Office Action fails to show that Zaki suggests the limitations of "employing a directed edge to represent the association confidence levels and association directions between

the items in the transaction data" (claims 1, 11). It is respectfully submitted that the Office Action appears to focus on confidence levels and disregards the limitation that directed edges are used to represent the confidence levels. To establish that the limitations are obvious, the Office Action must provide evidence that all the limitations are suggested, not just a select few.

The Office Action fails to establish a *prima facie* case of obviousness for any of the claims under any of the combinations of references. Withdrawal of the rejection and reconsideration of the claims are respectfully requested. If the examiner has any questions or concerns, a telephone call to the undersigned is welcome.

Respectfully submitted,

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